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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,749

06/14/2006

Martin Brunner

PP/1-23002/A/PCT

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EXAMINER

BUTTNER, DAVID J

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

02/11/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,749	Applicant(s) BRUNNER ET AL.	
	Examiner David Buttner	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/11/06</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim 17 provides for the use of the compound, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 17 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 and 14-17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nagao EP837085.

Nagao exemplifies (#20) a polycarbonate based on bis (4 hydroxyphenyl)cyclohexane with 1H, 1H perfluorobutanol as the terminal group. This clearly meets applicant's claims 1-3,5,6 and 8. Other fluorinated terminals such as 1H,

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1H, 2H, 2H perfluorohexanol (page 13 line 53) can be used which qualify as applicant's preferred terminals of claim 4. This polymer can be combined with antioxidants such as phenolic antioxidants (page 81 line 18; page 82 line 10). The polymer can be combined with another polycarbonate (page 18 line 16). Inherently, such a blending step would lower the surface energy of the other polycarbonate.

The reduced viscosity of the polycarbonate (abstract) can be as low as 0.2 dl/g which indicates a low molecular weight and relatively few repeating units.

Ishiwa '878 is cited for his correlation between Mw and viscosity (col 8 line 34).

Claims 1-17 rejected under 35 U.S.C. 103(a) as obvious over Nagao EP837085.

Nagao does not teach the relative amounts of fluorinated polycarbonate and other polycarbonate.

It would have been within the ordinary skill of the art to vary the proportions of each polycarbonate to obtain a final product with the "in-between" properties of each.

Claims 1,2,5,6,8,10,11,14,16 and 17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee '040.

Lee produces polycarbonates with fluorinated terminal groups (col 1 line 50). These polycarbonates can be blended with other polymers and additives (col 4 line 20-22). Inherently, such a blending step would lower the surface energy of the other polymer.

Claims 1-3,5,6 and 8 rejected under 35 U.S.C. 102(b) as anticipated by Brunelle '438.

Brunelle exemplifies (# II) the production of a biscarbonate which meets applicant's claims.

Claims 1,6,8,10-12 and 14-17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP06220182.

The reference produces polycarbonates having terminal groups derived from Y-A-OR_f (paragraph 11). When Y is -OH, this places a -O(CO)O-A-OR_f at the terminals of the polycarbonate. This meets fits applicant's formula if -A-OR_f is considered to be applicant's fluorine containing group R₁ and applicant's X₁ is a direct bond.

The polymer can be combined with another polycarbonate, thermostabilizers etc(paragraph 46). Inherently, such a blending step would lower the surface energy of the other polycarbonate.

Claims 1,6,8, and 10-17 rejected under 35 U.S.C. 103(a) as obvious over JP06220182.

The reference does not teach the relative amounts of fluorinated polycarbonate and other polycarbonate.

It would have been within the ordinary skill of the art to vary the proportions of each polycarbonate to obtain a final product with the "in-between" properties of each.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

2/9/09

/David Buttner/

Primary Examiner, Art Unit 1796